

The Interconnected Nature of Anymal and Earth Activism

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Abstract

Ecofeminism critiques the common Greco-diaspora worldview, which focuses on divisions and hierarchy, and is shared by millions of people in industrialized nations. Not surprisingly, given this worldview, environmental and animal activists are keenly aware of their differences, both philosophical and practical, and therefore envision their causes and their work as separate and distinct. Asian philosophy, indigenous traditions, and science offer alternative visions, presenting a more interrelational, interconnected, interdependent, unified, and egalitarian sense of the universe. If this alternative worldview is viable for earth and animal advocacy, it must shed light on pressing problems and indicate workable solutions, particularly with regard to the most pressing problems of the day. When applied to climate change and population/consumption, this alternative vision of an interrelational, interconnected, interdependent, unified, and egalitarian universe proves effective for identifying core concerns that are shared and indicating viable joint solutions.

Keywords

activism, ecofeminism, Asian philosophy, indigenous traditions, climate change, population/consumption pressures, plant-based diet, empowering women and girls

In the interest of protecting a rare flower, or an endangered bird, environmentalists might kill hundreds or thousands of goats (e.g., in Santa Catalina Island, off the coast of California), or those wanting to protect endangered birds might kill as many pigs as they can find (e.g., in Hawaii; Barron, Anderson, Parkes, & ‘Ohukani’ohi’a, 2011; Rainey, 1990). Anymal¹ advocates object to these policies, and to any consideration of nonhumans as “abundant” or “invasive” (The Nature Conservancy, n.d.). Environmentalists and anymal advocates are guided by different philosophical

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perspectives based on different foci: Environmentalists focus on ecosystems while anymal advocates focus on individuals; environmentalists seek to protect wilderness and free roaming species while anymal advocates seek to protect all individual anymals. Environmentalists frequently hold a measure of disdain for domesticated anymals, whereas anymal advocates have shifted from lobbying against anymal research to lobbying to protect farmed anymals, focusing less on free roaming anymals.

But what is wilderness without free ranging anymals? What is a bear without miles of undeveloped habitat? What is an ocean without fish or a fish without waterways? While environmentalists and anymal advocates have focused much on incompatible policies and campaigns, their differences are miniscule in comparison with the magnitude of shared concerns and reasonable responses to these shared concerns. With this in mind, this essay first explores worldviews that diverge from the Greco-diaspora view,² worldviews that envision all that exists as interconnected, including ecofeminism, Asian and indigenous philosophies, and scientific knowledge. The latter portion of the essay focuses on vital shared concerns for anymal and earth activists, namely, climate change and human population growth/consumption, highlighting the interconnected nature of the problems and solutions for each camp.

Theories of Interconnection

Ecofeminism, Asian philosophy and a variety of indigenous traditions, and science offer alternatives to the Greco-diaspora worldview, all of which present a more interconnected, interdependent, egalitarian sense of the universe.

Ecofeminism

Françoise d'Eaubonne coined the term *ecofeminism* in 1974, putting forward a theory connecting the exploitation and degradation of the natural world with the exploitation and degradation of women, which was soon expanded to include other oppressed human beings:

Ecofeminists see the oppression of women, people of color, children, lesbians and gays and the destruction of nature as linked and mutually reinforcing because of a system of domination that is legitimized and perpetuated by various institutions such as the state, the military, religion, the patriarchal family, and industrial capitalism. (Heller, 1995, p. 351)

Ecofeminists agree that the domination/oppression of people and the domination/oppression of nature are connected and mutually reinforcing—that all these denigrations and oppressions stem from a single source, creating systemic oppression (King, 2003).

Ecofeminists point to the dualistic worldview of the Greco-diaspora (see Table 1) as the core problem behind systemic oppressions. This dualistic worldview creates

Table 1. False Value Dualisms.

Prototype	Not prototype
Human	Not Human
Male	Not Male
White	Not White
Productive	Not Productive
Civilization	Not Civilization
Mind/Reason	Not Mind
Youthful	Not Youthful
Abled	Not Abled
Hetero/Cis	Not Hetero/Cis
Propertied	Not Propertied

division based on a sense of polar opposites, whereby individuals or phenomenon are denigrated in relation to this imagined ideal prototype.

Those closest to the ideal prototype, however it might be envisioned, strive to “maintain a strong distinction and maximize distance” in relation to those who do not fit the ideal prototype (Plumwood, 1991, p. 23). In this way, dualism leads to both “othering” and hierarchy—“prototypical” beings/things are valued above “others,” and are thereby privileged and empowered in relation to those in the non-prototypical category. Many ecofeminists find that this worldview lies at the foundation of the denigration and exploitation of individuals and the planet, tagged as “uncivilized,” “irrational,” and “sub-human,” fueling and supporting destruction of the environment as well as speciesism, sexism, racism, ableism, classism, heterosexism, and more.

False value dualisms are misguided at their core:

- XX and XY are not the only sex options. There are a host of karyotypes, including 45 X, 47 XXX, 48 XXXX, 49 XXXXX, 47 XYY, 47 XXY, 48 XXXY, 49 XXXXY, and 49 XXXYY (Callahan, 2009). Sexuality is now commonly understood to be fluid, best envisioned as a sliding scale.
- There is no “Black” in opposition to “White.” Anthropologists discovered the oldest human skeletal remains in Africa, and it is likely that all humans trace their ancestry back to Africa—especially given that human movement between Africa, Europe, and Asia was not inhibited by geographical barriers when humans emerged on the planet (MacEachern, 2012).
- No one is fully abled or fully disabled when we consider memory, artistic abilities, communication skills, genetic propensities, condition of teeth, vision, social skills, and so on.
- Humans are primates, mammals, animals, and part of nature—we cannot be opposite (let alone better than) what we are.

Despite contradicting the world as we know it, the Greco-diaspora vision of false value dualisms remains fundamental to millions of people, undergirding and perpetuating a worldview of irreconcilable difference, hierarchy, and competition.

Asia

Hindu philosophy provides a worldview of interrelations, encouraging people to “see themselves in every living being, and . . . every living being in Self” (Kemmerer, 2012, p. 63). The sacred *Upanishads* teach that, just as a pinch of salt placed in water cannot be seen or touched, but makes a glass of freshwater salty, so the subtle essence of life runs through all (Müller, 1962), pervading the blackbird, the human being, the leech, and the critically endangered cross river gorilla. As all rivers join to one sea, which rises again into the atmosphere to become individual drops, returning to the sea, so all living beings—whatever form they might take—are interconnected and thereby united (Müller, 1962). “As by one clod of clay all that is made of clay is known,” so we can understand all living beings through this shared essence of life (Müller, 1962, p. 92).

Hindu philosophy of interrelations is rooted in a philosophy of reincarnation, and the idea that each individual’s being/soul “is identical with the ground of the universe,” whether that individual is a reptile, an ungulate, or a primate (Embree, 1972, p. 59). The sacred *Upanishads* remind that each being is “the One that lies behind all” (Zaehner, 1962, p. 7). In the most famous portion of the *Mahabharata*, the *Bhagavad Gita*, the divine asserts, “I am not lost to one who sees me in all things and sees all things in me” (Mascaro, 1965, p. 6); “I am the life of all living beings. . . . All beings have their rest in me. . . . In all living beings I am the light of consciousness” (Mascaro, 1965, pp. 74, 80, 86). Those who are spiritually learned behold all beings in Self, Self in all beings, and God in all things (Dwivedi, 2000). In the Hindu tradition, the eternal divine flows through all that exists, and this sense of oneness unites not only all living beings, but all of creation—mountains and mountain lions, rivers and river dolphins, humans and Huron pines.

Buddhism, which emerged in India, shares the core philosophical vision of the larger and older religio-philosophical tradition, oneness, and interconnections. Over time, Buddhism espoused “a vision of *radical* oneness, of interidentification, where all entities are identified with all other entities,” where nothing and no one exists independently (Kemmerer, 2012, p. 103). In this vision, humans “inter-be” with all (Hanh, 1992, p. 96). Radical oneness does not permit any “other”; nothing is separate from the whole:

A human being is an animal, a part of nature. But we single ourselves out from the rest of nature. We classify other animals and living beings as nature, as if we ourselves are not part of it. Then we pose the question, “How should I deal with Nature?” We should deal with nature the way we deal with ourselves . . . ! Harming nature is harming ourselves, and vice versa. (Hanh, 1985, p. 41)

Buddhist philosophers indicate not merely that we are all “in this together,” but that we *are* all this, “rising and falling as one living body” (Cook, 1977, p. 229).

In China, Daoism also espouses a vision of interconnections and oneness. The Dao (Tao) “abides in all” (Jochim, 1986, p. 8), permeating all that exists (Wu, 1991), so that everything in the universe is “intrinsically related to and thus constitutive of ‘self’” (Ames, 1989, p. 120). In the Daoist worldview, humans are merely “one of the myriad kinds of beings” (Wu, 1991, p. 37), each entity just one tiny fraction of what is envisioned as a Great Unity of Being (Tu, 1989), every panda and porcupine, and each part of every panda and porcupine, are intimately connected to a larger whole (Tu, 1989).

Daoism also teaches interconnection through perpetual transformation. Daoism holds that everything stems from and returns to the basic matter of the universe, the Great Unity that *is* material existence (Parkes, 1989). “Individuals” in this great unity, are neither isolated nor enduring; any one individual or entity’s existence “is only a momentary happenstance in an ever-transforming universe” (Kemmerer, 2012, p. 141). A constant state of transformation and flux interconnects all (Thompson, 1996). After death, bodies recycle, but the “chain of being is never broken,” and each entity and every other entity remains connected throughout this process of perpetual flux and transformation (Tu, 1989, p. 70): “Now a dragon, now a snake, You transform together with the times, And never consent to be one thing alone” (Parkes, 1989, p. 92, a writing attributed to Zhuangzi). Based on Dao, the Great Unity of Being, and perpetual transformations, every part “of the entire cosmos belongs to one organic whole” that interacts as “one self-generating life process” (Tu, 1985, p. 35).

Constant flux ties each individual to all other beings, binding “all things into one, equalizing all” (Chan, 1963, p. 177). No particular species or individual is favored in the impersonal process of Daoist transformation (Tu, 1989): anymals are “equivalent to human beings” (Anderson, 2001, p. 165)—though “the myriad things are many,” “their order is one” (Chan, 1963, p. 204). Writings attributed to Zhuangzi teach of equality between humans, anymals, and the natural world, where all things are interconnected and interdependent, where all things are temporary, part of an ongoing process of transformation. Humans, the water in mud puddles, thistles, amphibians, fungi—all are part of one whole; all are equal (Tu, 1989). Daoism fosters a sense of “self” as an intimate part of a larger, ever changing, unified whole where human beings are of no greater importance than a spider mite or seaweed, cherry pit or shark fin, glacier or glass frog (Thompson, 1996).

The Confucian tradition also looks back to a single original source or creative power—the “Great Ultimate”—from which all things stem (Taylor, 1998, p. 300), through which all things are interconnected, forming one Great Unity (Taylor, 1998). Humans are “organically connected with rocks, trees, and animals” via the Great Ultimate (Tu, 1989) and the consequent Great Unity, through which only “one body” exists:

Everything from ruler, minister, husband, wife, and friends to mountains, rivers, spiritual beings, birds, animals, and plants should be truly loved in order to realize my humanity that forms one body with them, and then my clear character will be completely manifested, and I will form one body with Heaven, Earth, and the myriad things. (Wang quoted in Taylor, 2009, p. 302)

In the Confucian tradition, all that exists is connected with and equal to self (Taylor, 1998) in a universe where all that exists forms “one body with all things” (Taylor, 1998, p. 301).

Indigenous Traditions

Indigenous philosophies commonly teach of an interrelated world: Humans are animals, animals are people, and all people are one of many interdependent communities formed by various species (Kemmerer, 2012). Indigenous peoples generally recognize “their own villages as part of a larger community that includes *all* of the natural world” (Kemmerer, 2012, p. 23), recognizing shared origins in animals (including humans), plants, the land—all “belong to the earth” (Henare, 2001, p. 202). Indigenous sub-Saharan African teachings reveal humans to be “an inextricable part of the environment” and people find “themselves to be in a neighborly relationship with . . . earth, trees, animals and spirits” (Opoku, 2006, p. 351). These communities understand themselves “as beings in relation with the world around them” (Opoku, 2006, p. 353). Haida philosophy (western Canada) holds that human identity is “based on the land, the trees, and the whole of life within” (Suzuki & Knudtson, 1993, p. xxxiv). In this view, the land and all creatures represent Haida history, culture, meaning—“their very identity” (Suzuki & Knudtson, 1993, p. xxxi). Melanesian peoples envision the entire world, animate and inanimate, as part of their community (Namuna, 2001). Indigenous Quechua (Andes) speak of *Ayllu*, a word referring to

family that extends beyond just the human relatives. The rocks, the rivers, the sun, the moon, the plants, the animals are all members of the *ayllu*. All those that are found in the territory where they live in community are their *ayllu*. (Valladolid & Apffel-Marglin, 2001, p. 656)

In the Quechua worldview, “it is not only that everything is alive, but that everything is a person with whom one converses and shares, equally” (Valladolid & Apffel-Marglin, 2001, p. 655).

African philosophy, like many indigenous philosophies around the world, teach that all things are interconnected and interdependent (Opoku, 2006), a theme that runs through indigenous cultures. Nahua (near Mexico City) understand that natural surroundings (*cemanahuac*, “that which surrounds us”) are not merely essential for human survival, but also for the survival of all other living communities (Silva, 2001). Their teachings recognize all of nature as “important for the existence of any one being” (Silva, 2001). Indigenous stories “illustrate the fact that all living things and natural entities have a role to play in maintaining the web of life” (Cajete, 2001, p. 629). Mayan *Popol Vuh* creation stories remind that “the lives of humans, plants, animals, and the supernatural world” are interconnected through deep kinship (Montejo, 2001, p. 180). Their creation stories tell humans that they have been placed into, and are dependent on, a larger, preexistent world: In the *Popol Vuh*, there is a “collective survival that must exist between humans, plants, and animals. Humans are not separate” (Montejo, 2001, pp. 177-178).

Indigenous philosophies frequently teach that we are one, that “all are important,” and that all things are interconnected and interdependent, forming one interwoven community on planet Earth (Valladolid & Apffel-Marglin, 2001). The “central feature of proper interspecies relations in nearly every indigenous culture is to view every other individual . . . as part of self and community” (Kemmerer, 2012, p. 39). This leads to a sense of equality of beings. Traditional Sioux people (North America) understand that “all animals—two-legged, four-legged, everything—are equal” (Lee, 2017 p. 8). In the world’s many indigenous philosophies, there is a tendency to recognize all beings and nature as part of humanity’s extended and extensive community (Kemmerer, 2012).

Science

Biology also teaches that humans (like all animals) are ultimately and fundamentally dependent in an interconnected universe. Vegans (deer, rabbits, and so on), omnivores (including bears and coyotes), and carnivores (felines and raptors) require greens—none can live without grasses, shrubs, and trees that sustain the atmosphere and feed living beings. Everything green and growing lies at the foundation of existence—plants are foundationally important compared with animals, particularly humans, who do little to help ecosystems and much that is damaging. Moreover, if the ability to persist and live compatibly on Earth is any measure of evolutionary fitness, then humans must be recognized as a very unfit form of life, truly ill-suited to long-term survival: We are utterly dependent on what we tend to view as lowly and expendable, and our ways have proven entirely unsustainable. We have proven incapable of living compatibly with one another or with the world around us.

Science also informs us that anything that appears solid, distinct, or enduring is actually none of the above (NPR, 2016). Consider the human body: Through building new cells, the surface layer of our skin is replaced roughly every month, our liver completely rebuilds itself every 6 weeks, and our skeleton—all our bones—are completely replaced every decade (Fraser, 2015). Though we appear solid, our bodies are largely water, with babies floating the highest on the water-mark index—they are nearly 80% water (Healthcare-Online, 2018).

But to imagine ourselves to be even as solid as water would be presumptuous—the atoms that form our bodies (and every aspect of the material world) are 99.9% empty space (Physics Forums, 2005). Such information leaves one wondering not whether we are separate and distinct, but *whether we even exist as physical entities*. Perhaps any conception of an “individual” is specious.

Theories Summary

Greco-diaspora cultures tend to view the universe and everything in it from the standpoint of exclusive opposites and hierarchy. Ecofeminists expose and denounce this dualistic, hierarchical vision. Asian and indigenous philosophies, and scientists, provide a very different view of the universe—a vision of oneness, interconnections,

mutual dependence, and equality that belies the divisive, competitive, individualistic vision of the Greco-diaspora worldview.

Ecofeminism, Asian philosophies, indigenous philosophies, and science provide a basis for an interconnected, interdependent worldview, rooted in a sense of oneness and equality.

Case Studies

Philosophies that provide an interrelational, interconnected, interdependent, unified, and egalitarian sense of a universe feature a deeply and fundamentally interconnected nature of existence on planet Earth. For these philosophies to prove relevant to earth and animal advocacy, they must elucidate pressing problems and indicate viable solutions.

Climate Change on the Menu³

Climate change is a self-perpetuating, deadly serious environmental problem, now well beyond the point of no return. As oceans warm with climate change, methane bubbles up from the ocean floor, putting more greenhouse gas emissions (GHGE) into the atmosphere (Hickey, 2014). As temperatures rise at the poles of the earth, permafrost (now covering 25% of the Northern Hemisphere) melts, causing stored organic matter to rot, converting “carbon that’s in dead plants and animals into gases that cause climate change: carbon dioxide and methane” (Douceff, 2018, n.p.), which releases more methane (Resnick, 2017). As it turns out, “there’s more carbon in the permafrost . . . than all the carbon humans have spewed into the atmosphere since the Industrial Revolution” (Douceff, 2018).

While viewed as fundamentally an environmental concern, climate change holds deadly serious implications for anymals because of changing ecosystems and displaced human populations. Many wild anymals live in a particular ecological zone and cannot survive even a slight change in local climate (Australian Academy of Science, n.d.). Because of the “inter-connected nature of ecosystems,” any loss of species is likely to effect “a range of ecosystem functions” (Australian Academy of Science, n.d.). With changes in climate, vegetation changes; when vegetation (food sources) change, anymals must adapt, migrate, or die.

Climate change also displaces humanity via altered weather patterns and altered growing seasons, changes in precipitation and prolonged droughts, more violent storms and deadly fires, and melting of Arctic ice and rising oceans (How Climate Is Changing, 2018). In particular, rising oceans are predicted to cause massive human migrations even with a middle-of-the-road climate change projection. With a sea level rise of just one meter (Understanding Sea Level Projections, n.d.), one billion people are likely to be displaced—almost one-seventh of the world’s current human population (Hinrichsen, 2000). When they are flooded out of their current homes, yet more of the globe will turn into towns and cities, roadways, and agricultural lands, crowding

out anymals who currently live on those lands. Climate change calls animal activists to unite with environmentalists to work against this problem.

Climate change also calls anymal advocates and environmentalists to encourage a plant-based diet. Anyimal agriculture is the leading contributor to anthropogenic (human-caused) sources of GHGE (greenhouse gas emissions)—carbon dioxide, methane, and nitrous oxide. Globally, anymal agriculture contributes 51% of anthropogenic carbon dioxide (Goodland & Anhang, 2009), 40% of anthropogenic sources of methane (Oppenlander, 2011; Steinfeld et al., 2006), and close to 100% of human-caused nitrous oxide emissions⁴ (Smith & Mukhtar, n.d.; “Emissions of Greenhouse Gases”; Kemmerer, 2014). Because of anymal agriculture’s weighty contribution to greenhouse gasses, estimates indicate that humans who consume anymal products create ten times more fossil fuel emissions *per calorie* than those consuming a plant-based diet (Oppenlander, 2011).

Methane (CH₄), the second largest (after carbon dioxide) anthropogenic source of GHGE (greenhouse gas emissions; Oppenlander, 2011), traps solar radiation 25 times more effectively than does carbon dioxide (Goodland & Anhang, 2009). This lesser-mentioned, extremely potent GHGE holds 72 times more heat in the earth’s atmosphere than does carbon dioxide when calculated across 20 years (Oppenlander, 2011; Steinfeld et al., 2006). Anyimal agriculture is the number one anthropogenic source of GHGE. As cow, pig, and chicken manure decompose, “large amounts of methane” are released into the environment (Reay, 2006). Enteric fermentation (the digestive process of ruminants, or cud-chewing species) also creates vast quantities of methane (Robinson et al., 2014). There are 1.4 billion cattle on the planet, and 2 billion sheep and goats, belching out almost 8 million metric tons of methane annually—80% of the methane stemming from agriculture (Steinfeld et al., 2006). Because methane is extremely potent, ruminants cause the GHGE equivalent of more than 16 million metric tons of carbon dioxide (Cassuto, 2010; Steinfeld et al., 2006). Not surprisingly, with increased consumption of anymal products, methane pollution is up 145% (Steinfeld et al., 2006). Environmentalists have particularly strong reasons to lobby against the dairy industry. Cows forced to produce yogurt and ice cream require and consume more calories than cows slaughtered young for roasts and steaks, because cows in dairies must create and birth offspring in order to lactate—pregnancy and lactation require increased consumption, producing yet more urine and manure.

This ties back to anymal activism. In the last decade, wanton cruelty and sheer numbers of afflicted anymals have turned the focus of animal activism to anymal agriculture. Activists note that the suffering of dairy cows is particularly egregious. Many modern dairies, especially in the United States, inject cows with rBGH, an artificial hormone that causes cows to produce four times as much milk when compared with cows in 1950, increasing incidences of painful medical complications, particularly an udder infection called mastitis (Hallberg, 2003; Halverson, 2001). Perhaps most importantly, like humans, cows do not lactate without carrying a pregnancy to term: Cows on dairies are forcibly impregnated every year, and thereby bear a calf, which is taken away within 12 hours of birth, though the mothers try desperately to protect their young. Cows exploited for dairy go through this cycle about five

times—impregnation, birth, losing their young, followed by many months of artificial milking—before they are sent to slaughter, often arriving so exhausted by the exploitation of the dairy industry that they are unable to stand.

Though they suffer for only about 6 months in comparison with their mother's 6 years, the fate of calves, who are a by-product of the dairy industry, is little better. Male calves are generally confined in tiny pens and then killed for veal before they reach 6 months of age. Female calves are either condemned to the same fate as their mothers, or sent along with boy calves. Not only are these newborns deprived of their mothers so that we can drink their milk, but they are also subject to painful operations, such as tail docking, in which two-thirds of their tail is cut off *sans* anesthesia (Comis, 2005).

Those consuming anymal products—particularly dairy—cause tremendous suffering and premature death for farmed anymals, while contributing significantly more to climate change (Robinson et al., 2014). Moreover, anymal agriculture is the number one cause not only of climate change, but of deforestation, soil degradation, water pollution, freshwater depletion, dead zones—every serious environmental concern, including those focused on the world's oceans (Kemmerer, 2014). The “seafood” industry has created irreversible oceanic damage, further enhanced by the warming of the oceans. The world's oceans are in a state of “silent collapse” (San Diego Roots Sustainable Food Problem, n.d.).

Climate change is the most pressing contemporary environmental problem; the number one cause of climate change is anymal agriculture. Anyamal agriculture causes extreme deprivation and premature death to billions of anymals each year. For both environmentalist and animal activist, the source of the concerns is as clear as the solution—imminently sensible, interconnected activism based on very real (and pressing) interconnected concerns. And what is that solution? Go vegan, advocate for a vegan diet, and work on legislative changes that will force anymal industries and their supporters to pay the real costs of flesh (including sea anymals), dairy, and eggs.

Population and Consumption

If human population dropped by 50%, we would have roughly the same number of people on the planet as existed in the late sixties—about 3.5 billion people (Roser & Ortiz-Ospina, 2018). Environmentalists in the sixties were concerned about nuclear power and chemicals (exposed by Rachel Carson's *Silent Spring*), and a best seller, *The Population Bomb* highlighted the concerns of perpetual human population growth. If we again half the world's human population, we find ourselves in roughly 1900 (Roser & Ortiz-Ospina, 2018), when loss of species was high on the list of environmental concerns as Catalonia lost the Pyrenean ibex, Portugal and Spain lost the Portuguese ibex, Italy lost the Sardinian lynx, Albania lost a ray-finned fish (about which little is known), Switzerland lost a fish in the salmon family (Revolvy, n.d.), the United States lost the Carolina parakeet and witnessed the American Bison dropping from 30 million strong to a mere 40 beings. Pollution was also a concern in the early 1900s—in 1908 a Swedish scientist noted the greenhouse effect caused by the burning

of coal and petroleum (Environmental History Timeline, n.d.). In 1750, the human population was half that of 1900 (Roser & Ortiz-Ospina, 2018), and yet in 1798 Thomas Malthus (1766-1834) argued that the continued growth of human population would outpace our ability to produce food on productive lands (BBC, 2014).

The weight of exponential human growth on a limited planet has long been a primary concern for environmentalists, from species extinction to greenhouse gasses. But we know more than we did a few centuries ago, when authors and thinkers first pointed to the problem of exponential human population growth: Studies show that empowering girls and women with education, employment opportunities, and reproductive choices reduces birth rates (Knox & Marston, 2007). While it is never appropriate for one community to force their values on another, it *is* critically important to support other communities who are trying to bring positive changes for women and girls. (Please support organizations that focus on this need, such as *Population Connection* and organizations listed at *Educating Girls Matters*: <http://www.educatinggirlsmatters.org/howtohelp.html>.)

Environmental problems caused by excessive human population are inexorably connected with consumption patterns in wealthier nations. Most citizens in more developed countries drive cars, take daily hot showers, and live in heated/air-conditioned homes, while few people in less developed countries use resources in any of these ways (U.S. Energy Information Administration, 2013). Although U.S. consumers constitute less than 5% of the world's population, they consume as much as 25% of the world's energy (Gillaspy, 2018). If every nation burned through resources like U.S. consumers, we would need more than four earths to support the current human population (McDonald, 2015). North America and Western Europe account for only 12% of the population, but are responsible for 60% of "private consumption spending, while the one-third living in South Asia and sub-Saharan Africa accounts for only 3.2 percent" (WorldWatch Institute, 2011). National Geographic's "Greendex" study (2014) records changes in human consumption patterns in various nations across time, exposing the unwavering, problematic consumption patterns of wealthier, more developed nations:

- Environmentally friendly consumer behavior increased in 9 of 17 countries surveyed (Argentina, Australia, Hungary, India, Mexico, Russia, Sweden, South Korea, and the United Kingdom) while decreasing in five countries (Canada, China, Germany, Japan, and the United States).
- Top-scoring green consumers in both study years were India and China (followed by South Korea, Brazil, and Argentina in 2014).
- Consumption in the United States was the least sustainable throughout the duration of the study, which stretched from 2008 to 2014. (Greendex, 2014)

Consumption is no less environmentally important than population, particularly the consumption of animal products. Birth rates in Niger are four times higher than those of the United States, but the environmental impact of one U.S. citizen is *much* greater than the environmental impact of a single citizen in almost any other nation because of

U.S. consumption patterns—particularly the consumption of meat, dairy, and eggs. People in the United States consume 120 kg (264 lbs) of flesh annually, Australia downs 111 kg (244.2 lbs), and tiny New Zealand gobbles up 106 kg (233.2lbs.), and yet, a

diet rich in animal products leads to an environmentally devastating chain of events: greater land use, conversion of natural environments to farmland, displacement and death of wild animals living in these regions, and reduced wild populations in remaining wildlands (which leaves these populations more prone to extinction). Thus, the consumption of animal products leads to habitat destruction and species extinction. (Haley, 2015, p. 159)

As with climate change, animal agriculture is a primary concern when assessing environmental impacts of consumption:

- 70% of the grain crop is fed to farmed animals in the United States.
- 60% of grains are fed to farmed animals in the European Union (Oppenlander, 2011; Steinfeld et al., 2006).
- Eighty percent of the world's soybeans are grown for and fed to farmed animals (Reynolds & Nierenberg, 2012).
- Poultry (chickens, ducks, and turkeys) are primary consumers of “crop-based feed” (World Wildlife Fund, n.d.).
- Calves in feedlots consume more than one ton (2,000 pounds) of grain in just a handful of months before they are slaughtered (Kemmerer, 2014).
- Lactating cows consume a whopping 56 pounds (24.5 kg) of grain daily (Grant & Kononoff, 2007), enough grain to feed a family of five for a year (Brown, 2010).
- Most feedcrops are monocultures, requiring intensive fertilizers, pesticides, and herbicides (Halden & Schwab, 2014; Kaufman & Braun, 2004).

Preparing the soil, planting, tending, and harvesting so many millions of tons of grain to feed farmed animals—instead of eating plants directly—requires massive amounts of fossil fuels, emits a tremendous amount of GHGs, and wastes the food value of grains. Consuming animals, their nursing milk, or their reproductive eggs cycles grains through farmed animals while losing 80% to 90% of the protein, 90% to 96% of calories, and 100% of carbohydrates and fiber that grains contain (Kaufman & Braun, 2004). (Making matters worse, more than 40% of the foods produced in the United States are wasted (Jarvie, 2014), while about one third of foods produced for humans worldwide—approximately 1.3 billion tons—gets lost or wasted every year (Save Food, 2018).)

Animal activists have just as much reason to focus on human population and consumption patterns. An omnivore in a flesh-eating nation can easily consume 100 farmed animals each year (PETA, n.d.). In the course of their life, omnivores in the United States consume about “11 cows, 27 pigs, 2,400 chickens, 80 turkeys, 30 sheep

and 4,500 fish” (Durando, 2015). Because every mouth in a meat- and dairy-eating nation contributes to the suffering of anymals, animal activists have a vested interest in fewer human mouths—in fewer humans.

By advocating for less consumption and by working to empower women, animal activists protect habitat and thereby protect anymals. There is scarcely an anymal on the planet who would not benefit from fewer human beings, particularly in nations where humans are more likely to disrupt and damage wild lands with buildings, and in all-terrain vehicles, snow mobiles, and jet-skis, to run over anymals with cars, and overtly destroy free roaming anymals by choosing to hunt and fish as a form of recreation.

Human population and consumption are extremely pressing contemporary environmental concerns. Developed nations, in particular, need to focus on consumption patterns, the most problematic of which is the consumption of anymal products. The source of concerns is as clear as the solutions for both environmentalist and animal activist:

- Go vegan.
- Empower women and girls.
- Advocate for a plant-based diet.
- Advocate for policies and practices that empower women and girls.
- Advocate for legislative changes that force anymal industries and their supporters to pay the real costs of flesh, dairy, and eggs.

A perfect example of imminently sensible interconnected activism based on very real (and pressing) interconnected concerns.

Conclusion

The Greco-diaspora worldview tends to envision the universe, and everything therein, as existing in a relationship of mutually exclusive opposites and hierarchy, leading to division, conflict, competition, and individualism. Indeed, animal and earth advocates have focused on philosophical differences for decades, seemingly oblivious to a multitude of key shared concerns. Ecofeminism critiques this Greco-diaspora worldview, while ancient philosophies of Asia, indigenous worldviews, and contemporary scientists offer a contrasting vision of interrelations, interconnections, mutual dependence, oneness, and pervasive equality.

Examining the problems of climate change and human population/consumption—likely the most pressing contemporary problems—demonstrates the applicability of these alternative worldviews revealing interconnected concerns and solutions, suggesting that earth and animal advocates have every reason to join forces. Interconnected, interdependent problems ought to be approached simultaneously, in cooperation.

Effective advocacy requires a worldview grounded in actuality. Experience and common sense both indicate that protecting forests and chickens, girls and manatees, trans people and ocean fishes, indigenous peoples and prairie grasses, are all necessary

aspects of healing one wounded universe. Meanwhile, much is lost by maintaining an outmoded, wrongheaded worldview that divides activists, thereby weakening activism, when we might otherwise join forces, finding strength in numbers.

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Notes

1. "Anymal" (a contraction of "any" and "animal," pronounced like "any" and "mal") refers to all individuals who are of a species other than that of the speaker/author. This means that when human beings use the term, they indicate individuals from every species except *Homo sapiens*. If a chimpanzee signs "anymal," or a parrot speaks the word, individuals of every species (including human beings) are indicated except chimpanzees and parrots, respectively. Using the term "anymal" avoids the use of
 - "animal" as if human beings were not animals;
 - dualistic and alienating terms such as "non" and "other"; and
 - cumbersome terms like "nonhuman animals" and "other-than-human animals" (see Kemmerer, 2006).
2. Ecofeminists highlight a problematic worldview exemplified by early Greek philosophers, maintained by the Greco-diaspora, which includes North America and Western Europe, and many other more isolated areas, such as Australia and New Zealand, and including many nations affected by colonialism in Africa, Asia, South America, and beyond.
3. For more on diet and environment, see Kemmerer (2014).
4. Some authors offer lower GHGE figures for anymal ag, but lower figures do not include all GHGE contributions from anymal agriculture—from piles of manure, to creating and harvesting feedcrops, to enteric fermentation, from plowing feedstock fields to transporting grains to transporting chickens to transporting processed body parts. Moreover, those who dispute Goodland and Anhang's numbers are funded by or affiliated with the Livestock industry, which makes them a less-than-dependable source of information on the topic.

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